

GNFAC Avalanche Advisory for Sat Jan 12, 2013

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Saturday, January 12 at 7:30 a.m. Today's advisory is sponsored by Grizzly Outfitters in partnership with the Friends of the Avalanche Center. This advisory does not apply to operating ski areas.

Mountain Weather

Over the past 24 hours the mountains picked up a trace to one inch of snow. Temperatures this morning are ranging from five to fifteen below zero F and winds are light out of the NW blowing 5-10 mph. Today, skies will be mostly clear in the morning but will become partly to mostly cloudy by this afternoon. Temperatures will remain cold with highs climbing into the single digits above zero F and winds will remain light out of the NW. Light snow showers could develop late this evening, but no real accumulations are expected. Temperatures will gradually start to warm up by Monday.

Snowpack and Avalanche Discussion

Southern Madison Range Southern Gallatin Range

Lionhead area near West Yellowstone

The avalanche warning has expired, but a dangerous avalanche situation remains. A weak layer of facets that formed during the first week of January is now buried under 12-14 inches of new snow. This fragile weak layer produced unstable results in stability tests on Thursday ([video](#)) and will be unable to support the weight of a skier or rider today. For this reason, human triggered avalanches remain very likely on wind loaded slopes and slopes steeper than 35 degrees which have a [HIGH](#) avalanche Danger. All other slopes have a [CONSIDERABLE](#) avalanche danger.

A Game Changer:

Prior to the most recent storm, stability was good and riding in avalanche terrain was not as dangerous. Now - stability has decreased dramatically and riding in avalanche terrain is serious business. It's important to note - slopes that were safe a week ago will not be safe today. Be conservative in your decision making and don't be lured onto a steep and unstable slope by untracked power.

Cooke City

Since the beginning of the week the mountains near Cooke City have received 14 inches of snow. This area mostly lacks a weak layer of faceted crystals under the new snow which is helping overall stability. There are exceptions especially in lower elevation areas like Town Hill and I expect this layer can be found on isolated slopes in the alpine as well.

Today, the primary avalanche concern for the mountains around Cooke City will be wind slabs. Yesterday, strong winds from the WNW transported snow onto leeward slopes. In some areas wind deposited snow could be resting over lower density or faceted snow. This combination is a good recipe for human triggered avalanches. Pay close attention to signs of instability such as cracking and collapsing and digging a snowpit in

the area you plan to ride is highly recommended.

Today, human triggered avalanches are likely on wind loaded slopes which have a [CONSIDERABLE](#) avalanche danger. Non-wind loaded slopes have a [MODERATE](#) avalanche danger.

Bridger Range Northern Gallatin Range Northern Madison Range

The mountains near Bozeman and Big Sky received 4-5 inches of low density snow over the past few days. These areas also have a weak layer of facets that formed during the first week of January ([video](#)), but the latest round of snow did not add a significant amount stress to this layer. Additionally, strong winds earlier in the week made the distribution of this weak layer somewhat random, and it does not exist on all slopes. Yesterday, I toured into Beehive Basin and found the new snow bonded well to old snow surfaces that were not faceted. Slopes that did have facets near the surface produced unstable results during stability tests, but the load was not significant enough to increase the avalanche danger.

Today, human triggered avalanches are possible and the avalanche danger is [MODERATE](#).

I will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations drop us a line at mtavalanche@gmail.com or call us at 587-6984. If you are unsure what types of information we are looking for, this article explains it well ([article](#)).

[EDUCATION](#)

Today and Sunday, January 12 and 13, Snowmobiler Introduction to Avalanches with Field Course in Bozeman. Space is still available. For more information and to sign up: <https://www.ticketriver.com/event/4979-snowmobiler-introduction-to-avalanches-w-field>

Wednesday, January 16, 7:00 p.m. "The Sidecountry is Backcountry" at MSU's Procrastinator Theater in Bozeman, a free 1-hour presentation.

Saturday, January 19, Rescue Clinic for Snowmobilers in Cooke City starting at Cooke City Motorsports. This 6 hour clinic teaches how to use avalanche rescue gear and perform an avalanche rescue. Registration is required. For more info and to sign up, visit: <https://www.ticketriver.com/event/4980-companion-rescue-clinic-for-snowmobilers>

Saturday, January 19, 6 -7 p.m., 1-hour Avalanche Awareness at the Cooke City Community Center.

Wednesday, Thursday, and Saturday, January 23, 24, and 26. MSU Introduction to Avalanches with Field Course. Wed and Thurs evenings and all day Saturday. For more information and to register, visit: <https://www.ticketriver.com/event/4970-introduction-to-avalanches-w--field-course>